

Appl. No. 10/618,012  
Amdt. Dated January 16, 2006  
Reply to Office Action of October 18, 2005

### **REMARKS**

Applicants thank Examiner for acknowledging receipt of foreign priority document, Japanese Application No. JP2002-203440, that has been submitted pursuant to 35 U.S.C. § 119 and/or PCT Rule 17.2(a).

Applicants respectfully request reconsideration of Examiner's objection to the Drawings under 37 C.F.R. 1.83(a). In regard to claim 6, Applicants note that the use of a power off button / power off command signal is illustrated in Figure 1. Accordingly, one of ordinary skill in the art, in view of Figures 1 and 9 and the full text disclosure, would have known that the power-off button sends a signal to turn off the device of Figure 9 in a similar manner as that shown in Figure 1.

Additionally, as stated in 37 C.F.R. 1.81, the applicant is only required to furnish drawings of his or her invention where necessary for the understanding of the subject matter sought to be patented. Applicants submit that the current drawings and specification together more than adequately describe the subject matter of claim 6 in order to allow one of ordinary skill in the art to build the device. Furthermore, a power button is so well known in the art, it need not be illustrated since it is certainly not necessary for the understanding of the invention.

Applicants have also amended the Specification to correct the Figure references, the element numbers, and various other inconsistencies noted by the Examiner in the last Office Action. No new matter has been added.

Appl. No. 10/618,012  
Amdt. Dated January 16, 2006  
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Without conceding the propriety of the Examiner's position, and solely to expedite prosecution, claims 1 – 3, 7, and 9 have been cancelled without prejudice or disclaimer.

Applicants have amended the remaining claims in view of the Examiner's 35 U.S.C. §112 rejection, and believe that these issues have also been cured.

Applicants respectfully request reconsideration of Examiner's rejection of claim 4 under 35 U.S.C. §103(a). The Examiner has rejected these claims in view of the cited prior art references of *Yasui et al.* (U.S. Patent No. 5,248,963) in view of *Everitt* (U.S. Patent No. 6,594,606). *Yasui* teaches a method of clearing a display image on a LCD panel, and *Everitt* teaches the use of a precharge circuit. The Examiner has stated the proposed motivation to combine as "to determine and apply the correct voltage at the beginning of scans of current-driven devices in an array." While this statement certainly provides motivation to include a pre-charge circuit in a LCD device, Applicants assert that this statement provides no motivation to implement a clearing circuit in the precharge circuit. Applicants assert that one of ordinary skill in the art, after reviewing both the *Everitt* and *Yasui* references, would, at most, be motivated to build a LCD display unit utilizing a precharge circuit to precharge the LCD pixels "in order to apply the correct voltage at the beginning of scans of current-driven devices in an array" and would have been motivated to implement a display-clearing circuit using the vertical and horizontal driver circuits as disclosed in *Yasui*. However, neither reference provides any teaching or motivation for creating an entirely new pre-charge circuit that incorporate a screen-clearing circuit.

Appl. No. 10/618,012  
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Applicants note that the Federal Circuit has held that “It is insufficient to establish obviousness that the separate elements of the invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the elements.” *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957 (Fed. Circ., 1997). Additionally, the court has stated that “Because virtually all inventions are combinations of old elements, that the invention at issue may be a combination of known elements is irrelevant to question of obviousness.” *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 959 (Fed. Cir. 1986).

In light of the foregoing, Applicants submit that the Examiner’s 35 U.S.C. §103 rejection must be withdrawn, and claim 4 placed in condition for allowance.

Applicants respectfully request reconsideration of Examiner’s rejection of claims 5, 6, 8, and 10 under 35 U.S.C. §103(a). The Examiner has rejected these claims in view of the cited prior art references of *Yasui et al.* (U.S. Patent No. 5,248,963) in view of *Yanagisawa* (U.S. Patent No. 6,621,489). *Yasui* discloses a method of “permitting clearing of a display on a liquid crystal display panel in a markedly shorter time than in the past.” *Yanagisawa* discloses a clear screen power off “to provide an LCD display unit that does not produce irregular after-images on the LCD display when the power supply is shut off.” The Examiner has not asserted a motivation to combine, but has merely restated the objectives of each invention. More specifically, neither reference teaches or suggests a combination of the active and passive power-off methods and a selecting means to select between the two modes.

Applicants invention is directed to an apparatus and device that overcomes the shortcomings of the prior art devices. More specifically, Applicants have discovered that

Appl. No. 10/618,012  
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the method of clearing all pixels at once as disclosed in *Yasui* has unwanted effects, such as a large instantaneous current flow through the liquid crystal display device.

Additionally, Applicants have discovered that the method of writing clear values to each pixel in a normal scan operation takes too long to complete when the power supply is purposely or accidentally removed from the device. Accordingly, Applicants' invention is directed to a device that incorporates both modes, and includes a switching means to select which mode to use. As a result, the device avoids the application of large instantaneous current flows by utilizing the normal scan operation to clear the display whenever possible. When not possible, however, the switch means provides for the ability to select the instantaneous discharge method. Neither reference teaches or suggests such a device. For this reason alone, Applicants submit that the rejection must be withdrawn.

Additionally, Applicants note that under Section 2143 of the MPEP, in order to establish a *prima facie* case of obviousness, the Examiner must meet three basic criteria. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." *MPEP §2143 rev. 3* (August, 2005). Applicants' assert that the Examiner has failed to establish a *prima facie* case of obviousness for at least the reason that the prior art references, even if combined, fail to teach or suggest **all** of the claim limitations. More specifically, none of the cited references teach or suggest a selecting means which selects between a first screen-

Appl. No. 10/618,012  
Amdt. Dated January 16, 2006  
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clearing power-off mode and a second screen-clearing power-off mode. For this additional reason, Applicants submit that the rejection must be withdrawn.

Examiner's remaining references cited but not relied upon, considered either alone or in combination, also fail to teach applicant's currently claimed invention. In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

Respectfully submitted,

Date:

1/18/06

  
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